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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
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09/090,119 06/04/98 HALSTEAD

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TM02/0927

EXAMINER

EDURSON, G
ART UNIT PAPER NUMBER

2151
DATE MAILED:

09/27/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/090,119

Applicant(s)

HALSTEAD

Examiner

Gary Fourson

Art Unit

2151

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 2, 2001
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- *See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892) 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 20) ☐ Other:

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DETAILED ACTION

This final rejection is responsive to Amendment A, received 2 July 2001.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

2. **Claims 1-3, 8-11, 15, 16, 19, 22, 23, and 27 are rejected under 35**

U.S.C. 102(e) as being anticipated by Henckel (6,105,036).

With respect to claims 1, 8, 10, 15, 19, 22, 23, and 27, reading a persistent representation [col 4 line 21, source file] of a complex data object [col. 4 line 21, multimedia objects] containing a sequence of executable instructions [col 4 lines 24-25, "ordered arrangement of program statements"] directly executable on a program interpreter [col 4 lines 33-36], and the program interpreter for executing/interpreting the instructions as a sequence/series of calls [col 4 lines 24-25, "ordered arrangement of program statements"] on a library of predefined functions [Henckel notes in col 4 lines 41-51 that VRML is one example of a language providing a collection of interpretable statements.] to directly construct [col 4 lines 58-67 states, "As discussed above, embodiments ... display objects in ...or multimedia representations."] the multi-component data object from the representation.

As to **claims 2, 3, 9, 11, and 16**, Henckel teaches display or presentation of multimedia objects [col 4 lines 58-67].

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Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. **Claims 12-14, 21, and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Henckel (6,105,036) in view of Kolawa et al. (US 5,784,553).**

As to **claims 12-14, 21, and 24-26**, Kolawa et al. teaches the interpreter is a local stack-based virtual machine including a temporary storage array [column 17 lines 38-65]. The advantages of utilization of virtual machine operating systems on stack based processing hardware were well known at the time the invention was made. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the stack-based virtual machine taught by Kolawa et al. in combination with the teachings of Henckel, because Henckel recognized that source code files may be in an interpreted language. [column 4 line 34]

5. **Claims 1, 4-7, 15, 17-19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Celi, Jr. et al. (US 6,157,933) in view of Jaworski (Java 1.1 Second Edition).**

With respect to **claims 1, 4-7, 15, 17-19, and 20**, Celi, Jr. et al. teaches reading a persistent representation [Java animation image applet stored on server], interpreting the instructions [As was known to those of ordinary skill in the art at the time the invention was made, Java applets are comprised of Java byte codes interpreted by a Java Virtual Machine included with many common HTML browsers.], calling different ones of

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predefined functions in accordance with the instructions to construct the data object directly from the representation [col 3 lines 1-13],

Jaworski provides example applets on pages 734-737. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the example applets of Jaworski with the embedded web page requesting/displaying of Celi, Jr. et al., because Celi, Jr. et al. recognized that applet content may be embedded. From the code example listings 40.1-40.4, Jaworski teaches wherein some functions return an explicit result [Listing 40.1, "public void paint" returns the result "Graphics g"], wherein some functions have arguments [Listing 40.1 calls functions "g.setFont," "g.setColor," "and "g.drawString," which all use arguments.], a call to one of the functions includes a call to another function as an argument of the first function ["g.setFont utilizes the method "new Font" as an argument], a call to one of the functions includes obtaining a constant value as its argument [see "g.drawString"], and wherein some of the instructions are compressed identifiers for different ones of a predefined set of methods [Method resolution between similarly named functions in object oriented programming may be facilitated through argument matching.].

Response to Amendment

6. Applicant's arguments filed have been fully considered, but they are not persuasive. Applicant has presented the following arguments:

Applicant argues that the prior art of record fails to teach obtaining a persistent representation of the structure of the complex data object as a sequence of directly executable instructions, which are calls to predefined functions, as well as calling predefined functions that correspond to the sequence of directly executable instructions so as to construct the complex data object directly from the persistent representation.

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In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the directly executable instructions being calls to predefined functions as well as calling predefined functions) are not recited in claim 15. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., the complex object being constructed without parsing or translating an explicit definition of the complex data objects's structure) are not recited in the rejected claims. Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims.

Applicant has challenged the Official Notice that virtual machines were well known at the time the invention was made to provide execution of instructions by a stack based virtual machine interpreter such as a java virtual machine (JVM). HTML, VRML, XML, and Java are all interpreted languages with libraries of functions available to facilitate execution of the same code across platform boundaries without having to rewrite the functions according to the operating system or language utilized by the diverse platforms. However, the Office has added the reference Kolawa et al. to satisfy Applicant's seasonable challenge and does not present new grounds of rejection for claims 12-14 and 21.

Pertinent Prior Art

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Shane (US 5,793,972) teaches dynamic web page creation through the utilization of executable programs written in common gateway interface (CGI) script programming language. [col. 5 lines 20-50]

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Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication should be directed to **Gary Fourson** at telephone number **(703) 305-4392** or E-mail at the address **gary.fourson@uspto.gov**.

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

The fax number (703) 305-9731 for formal, to be intended for entry into the application, or informal communications may be utilized for expedited transactions.

gsf

September 24, 2001



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